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ABSTRACT

The current status of women and minority faculty is briefly reviewed, and alternative explanations for patterns of differences that exist are identified. Although female faculty have gained in their proportionate representation during the 1970s, they still lag behind their strength of a half century ago. In addition, female scholars tend to be segregated by discipline, and are disproportionately represented at the lower ranks, reflecting the recent infusion of new hires during the 1970s. Compensation for female scholars has been at a rate averaging 20 percent below their male colleagues. The current status of black faculty is characterized by the following: blacks as a group have made considerably less progress than women in infiltrating the academic profession, although they began in the 1970s to infiltrate predominately white institutions on a larger scale than before; black faculty are concentrated chiefly in education and several areas of the social sciences; they have tended to be concentrated in the lower ranks and isolated from a major role in institutional administration and governance; and in the area of compensation, black faculty, especially females and the most prolific publishers, began to do well by the early 1970s. Three principle sources of evidence are available to test the thesis that overdiscrimination is responsible for the differential status of women and black professors in comparison to that of white males: studies on hiring decisions, studies of discriminatory attitudes on the part of majority males, and studies of inequity in the distribution of salary. A second thesis to account for status differences based on differential levels of performance and productivity is examined. A bibliography is appended. (SW)

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WOMEN AND MINORITY FACULTY:

A SYNTHESIS OF EXTANT EMPRICIAL RESEARCHERS

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WOMEN AND MINORITY FACULTY:

A SYNTHESIS OF EXTANT EMPIRICAL RESEARCH

Introduction

The decade of the 1970s witnessed a heightened consciousness of the status of women and minorities in Academe--a function of the heightened self-consciousness raised by the women's and civil rights movements. That self-consciousness has been translated into government policy and legal mandates, e.g., anti-discrimination legislation, executive orders, affirmative action regulations, and new federal structures such as USOE's Office of Womens Equity. It has also intruded both directly and indirectly into academic and professional structures: On-campus, we have seen the growth of women and minority studies programs, black student unions, minority and/or women faculty caucuses, resource/research centers, as well as affirmative action offices; off-campus, we have seen the emergence of women and minority caucuses in most major professional associations (and projects within higher education associations, e.g., the AAU's project on the status of women), new national resource and support organizations, e.g., HERS, as well as new professional journals (e.g., Sex Roles: The Journal of Educational Equity) and special issues of extant journals (e.g., the Harvard Educational Review's special issue on women in 1979 and 1980; and the recent special issue of the Educational Researcher).

As the academic arm of the women's and civil rights movements, women and minority studies programs have sought to develop a knowledge base to form the intellectual foundations of the movements. In the case of the women's movement, in particular, there has been a massive effort to direct social scientific inquiry toward an understanding of biological/psychological

sex differences, socialization and sex roles, the realtionships among gender, race, and class, the historical roles of women and minorities, the history and function of the family in the United States and cross-culturally, women and minorities in the labor force and before the law (Howe, 1979). Most immediately, investigators have sought to develop a knowledge base on women and minority professionals in Academe--the "soldiers" in the intellectual arm of the movement. This latter knowledge base has at least three components:

1. "N of 1" autobiographical accounts of life as a woman or minority professional in Academe (e.g., Nielson's (1979) in the Harvard Educational Review; Abramson's (1975)book length account on) that draw on subjective experiences to illuminate in a very immediate way the trials and tribulations of being different in Academe;
2. Opinion and hortatory pieces that provide arm-chair analyses and descriptions of discrimination; and
3. More broad based empirical studies of women and minority professionals in Academe.

This essay focuses on an examination of the third component of this evolving knowledge base on women and minority professionals in Academe. This component includes a diverse array of status reports initiated by individual institutions and professional associations, independent studies of women and/or minority professionals in Academe, as well as national level surveys of new doctorates and/or academic professionals that employ sex or race as independent or control variables (e.g., the National Research Council's annual survey of doctoral recipients, the American Council on Education-

Carnegie Commission's faculty surveys, the Higher Education Government Information Survey directed by the National Center for Educational Statistics). All of these studies have focused primarily on the then current status of women and minorities (vis-a-vis a matched sample of majority males) on a variety of career related variables in an effort to assess the existence and extent of discrimination. Salary has been the central career related variable examined, followed by promotion/tenure, work assignments, and location within the institutional stratification system. The results of such studies suggest that in many respects, women and minorities differ from majority males, while in others, they do not. The question of what sense to make of the patterns of differences and similarities that do exist is at once less often and less carefully addressed: Are differences a matter of choice, overt discrimination, or differences in level of performance/productivity? And it is to this sort of question that the present essay addresses itself. Specifically, we seek to:

1. Provide a relatively brief overview of the current status of women and minority faculty (much of that overview is available in greater detail elsewhere, e.g., for women faculty, v. Kane, 1976; Gappa and Uehling, 1979; for minority faculty, v. Rafky, 1972 and Moore and Wagstaff, 1974);
2. Identify alternative explanations for patterns of differences that do exist and weigh the extant empirical evidence related to each of these alternative explanations.

It is assumed that an understanding of the sources of status differences and their relative weight will provide a surer guide to approaching any inequities that exist.

The Current Status of Women Faculty

What is the current status of women in the academic profession at large (their proportionate presence, their distribution by institutional type and discipline)? And what is the academic woman's status at her own institution (in terms of rank, promotion, compensation, and participation in administration and governance)?

In 1978, women constituted just over one-quarter of all full-time faculty. While that figure evidences a 3 percent decline in their proportionate representation over the past half century (women constituted about 28 percent of all faculty in 1929-1930), it represents a 5 percent increase in their ranks during the decade of the 1970s. Women are disproportionately located at community colleges (35 percent of all community college faculty in 1975) and at medium and lower quality four-year colleges (25 percent in 1975). They are underrepresented at universities, generally, but particularly at major research institutions. There is some evidence, however, of a shift in institutional location among "new hires" in the early and mid-1970s. Bayer (1973) reported a 2 percent gain in proportionate representation for women in universities (15 percent to 17 percent) between 1969 and 1973, balanced by slight losses in proportionate representation at the four-year and community colleges. Both Centra (1973) and Cartter (1975) found that between 1967 and 1973 the proportion of women among "new hires" was two to five times greater than their proportionate representation in faculty ranks at the most prestigious research universities. Cartter's (1975) data (v. Table 1 below) documents a progressive convergence in the first job placement pattern of male and female Ph.D.s during the early 70s. That convergence resulted from a steady decrease in job opportunities for

TABLE 1

Percentage of New Doctorates Teaching at Institutions Equal or Superior to Degree-Granting Institutions, by Sex, 1967-1973

Degree-Granting Institutions	1967	1968	1971	1972	1973
			Men		
Group I	20.1	18.8	13.4	13.8	10.3
Group II	23.0	21.2	18.8	17.3	14.5
Group III	25.8	25.6	19.1	19.5	16.0
Group IV	41.1	36.4	32.3	30.8	26.4
Group V	60.8	56.1	50.7	48.7	44.3
All universities	29.2	27.6	24.4	23.9	20.6
			Women		
Group I	8.9	15.3	10.0	11.4	12.8
Group II	19.8	19.6	17.6	15.7	17.9
Group III	23.8	25.9	22.4	27.4	21.7
Group IV	27.0	35.6	33.0	31.5	30.5
Group V	51.6	55.8	46.9	45.6	44.8
All universities	22.8	26.7	24.4	24.9	23.8

Source: Cartter (1975)

males while females held their own in a declining job market.

The distribution of academic women across disciplinary fields appears to display a similar pattern. In 1970, 55 percent of all female faculty were to be found in just four fields: the performing arts (art, drama, music), foreign languages, health-related professions, and English. They were scarcest in the fields such as economics (8 percent of all full-time faculty), law (7 percent), engineering (6 percent), physics (5 percent), agriculture (4 percent). And these patterns of concentration and scarcity in faculty ranks clearly reflected patterns of distribution by field among doctoral degree recipients. By 1977, however, disciplinary patterns by sex among new Ph.D. recipients and current graduate students had begun to change. A glance at Tables 2 and 3 suggest that while female representation in the engineering sciences may be even declining, academic women are being increasingly drawn to law, economics, the physical sciences (footnote: Much of the increase in the physical sciences is, however, attributable to increased representation in chemistry, while representation in physics remains around the 5-6 percent level), and agriculture/natural resources (footnote: It should be noted, however, that over two-thirds of the female doctoral recipients in this area had specialized in "food sciences", i.e. the more traditionally female area of home economics). Precisely when, and even whether, these changing foci of graduate study will be reflected in a swelling of faculty ranks in more traditionally masculine fields remains to be seen.

When we turn to a consideration of the woman scholars status at her own institution, the winds of change are less evident. Women have historically been concentrated in the lower ranks, and in the mid-1970s, nearly

TABLE 2

Proportion of Females Among Ph.D. Recipients
in Selected Fields, 1976-77*

Field	% Female
Engineering	3.8
Physical Sciences	9.5
Chemistry	12.0
Physics	5.8
Agriculture and Natural Resources	6.9
Food Sciences	23.5
Law	22.5
Economics	11.3

*Based on NCES data (National Center for Education Statistics, 1979)

TABLE 3

Proportion of Females Among Enrolled
Graduate Students in Selected Fields, Fall 1976

Field	First Year	Beyond First Year
Agriculture and Natural Resources	20.6	13.3
Engineering	5.3	4.7
Law	28.2	24.7
Physical Sciences	18.7	13.4

*Based on NCES data (National Center for Education Statistics, 1979)

80 percent of all women faculty were at the assistant professor or lecturer level. The influx of female "new hires" during the early and mid-1970s were absorbed at the lower ranks as evidenced by the "lopsided" change in the rank distribution of female faculty for the 1970s. A glance at Table 4 shows almost no change in the proportion of women that were full or associate professors between 1972 and 1978, together with a notable swelling at the assistant professor and lecturer ranks. Moreover, the concentration of the woman scholar at the lower ranks seems to be intensified as one ascends the academic prestige hierarchy: A glance at Table 5 suggests that at the upper ranks, the disparities between male and female faculty are twice as great at universities as they are at four-year colleges, and then again many times greater at four-year institutions than at the community colleges. These inequities in rank beyond the initial appointment suggest that women are promoted at a slower rate than their male colleagues. And indeed Kane (1976) found that to be the case, although promotion rate appeared to vary by discipline: The relatively small group of women scholars in the natural sciences were promoted on a par with men, while the larger group of females in the humanities and social sciences were promoted less rapidly than their male colleagues (Kane, 1976).

In the matter of compensation, over fifty major studies completed during the past decade point incontestably to a single conclusion: Women are paid less than men, even after controlling for institutional type, rank, and discipline. Indeed, while male/female disparities in compensation remained fairly constant between the second world war and 1970, that disparity actually began increasing mid-way through the 1970s. The latest evidence from the 1980-81 Chronicle of Higher Education survey of faculty

TABLE 4

Percent of Women by Rank among All Full-Time Instructional Faculty in Postsecondary-Education Institutions, 1972 through 1978

Rank	Year					4-Year Percent Change
	1972-73	1974-75	1975-76	1976-77	1977-78	
Professor	9.8	10.1	9.8	9.6	9.7	- 0.1
Associate Professor	16.3	17.0	17.0	17.7	18.0	+ 1.7
Assistant Professor	23.8	27.3	28.9	30.4	31.7	+ 7.9
Instructor	39.9	41.0	40.7	50.6	50.0	+10.6
Lecturer		38.9	40.4	40.8	42.8	
Total	22.3	24.1	24.3	25.2	25.5	+ 3.2

Source: Gappa and Uehling (1979)

[1]NCES data, cited in Chronicle of Higher Education, (10 February 1975) p. 8.

[2]U.S., Department of Health, Education and Welfare, National Center for Education Statistics, Salaries and Tenure of Full-Time Instructional Faculty in Higher Education, NCES 77-313 (Washington, D.C.: Government Printing Office, 1977), p. 1.

[3]U.S., Department of Health, Education and Welfare, National Center for Education Statistics, "Memorandum on Selected Statistics on Salary and Tenure of Full-Time Instructional Faculty," 15 April 1978, p. 5.

TABLE 5

Proportion of Males and Females Who are
Full or Associate Professors by Institutional Type*

Institutional Type	Sex		Male/Female Difference
	Male	Female	
Universities	67.3	32.7	- 34.6
Four-Year Colleges.....	55.4	36.8	- 18.6
Community Colleges.....	24.0	22.0	- 2.0

*Based on data reported by Bayer (1973)

salaries (Magarrell, 1980) suggest that some effort may be underway to decrease the disparity: The compensation of academic women increased by 9.6 percent as opposed to 8.8 percent for academic men. This 0.8 percent differential does not begin to address a disparity on the order of 20 percent. Moreover, the latest surveys do not report the distribution of salary increases by rank--a critical factor since studies nearly unanimously find that male/female disparities of compensation tend to increase with rank and career age. Bayer and Astin (1978) found near equity in entry-level salaries at the junior ranks as of the mid-1970s, but aggravated disparities at the higher ranks. Simon, Clark, and Galway (1976), LaSorte (1971), Robinson (1973), Centra (1974), Johnson and Stafford (1974), Fulton (1975), Kane (1976), and Tuckman (1976) all attest to a compensation pattern of near equity during the first five career years, followed by an increasing disparity which narrows only during the final years of the academic career. Moreover, Tuckman (1976) reports that the disparity tends to be aggravated for those who embark on their careers at a later age--as more female scholars tend to do.

Beyond career age, disparities and compensation vary by institutional type and discipline. Disparities are highest at the major research universities where males earn nearly a third more than their female colleagues, lower at other universities and comprehensive colleges (differences on the order of 20 percent), and lowest at the least selective liberal arts institutions and the community colleges where males receive barely a 10 percent differential over their female colleagues. Among disciplinary groupings, the magnitude of the salary disadvantage of females appears to vary by their proportionate representation in a given discipline (Gordon et al, 1974; Johnson and Stafford, 1974; Kane, 1976). As a general rule, the male/female

disparity increases as the proportion of females in that discipline increases. Thus, for example, female physicists and chemists are in a relatively better position vis a vis their male colleagues than female educators and linguists (footnote: There are, of course, some notable exceptions to this rule, e.g. business administration and economics show very high disparities).

Women scholar's relatively low institutional status vis a vis their male colleagues is reflected as well in the areas of institutional administration and governance. Oltman (1970) found that among a sample of 454 colleges and universities, fully one-third had no female department chairpersons; and those females holding department chairpersonships were in traditionally female fields. In the American Council on Education's 1972-73 faculty survey, females were 10 percent less likely than their male colleagues to have held department chairmanships, especially at universities, and were half as likely as their male colleagues to have held major faculty wide offices, e.g. deanships. Baldridge et al (1978) reported that females in his representative sample of 200 colleges and universities were significantly less likely to serve on university committees than their male colleagues and those females who did serve, were less likely to be in leadership positions or to view their committee activities as <u>significant</u>. At the departmental level half as many women as men reported significant influence on policy. These disparities tended to be exacerbated at the larger institutions, primarily universities. While much of the disparity seemed to attributable to rank rather than sex <u>per se</u>, the concentration of female scholars in the lower ranks, especially at universities, has effectively neutralized the role of academic women in governance.

By way of summary, the following conclusions can be drawn by the current status of women scholars in Academe:

- Female faculty have gained in their proportionate representation during the 1970s, but still lag behind their strength of a half century ago;
- Female scholars tend to be segregated by discipline (although there has been a noticeable opening up in some tradtionally male fields, particularly over the latter part of the 1970s) and by institutional type (although there have been gains in the 1970s at the university level, especially among "new hires");
- Females are disproportionately represented at the lower ranks, reflecting the recent infusion of new hires during the 1970s;
- Females have generally been promoted at a slower rate than their male colleagues, especially in those fields in which they are most fully represented;
- Female scholars have been compensated at a rate averaging 20 percent below their male colleagues (while near equity has been achieved among new hires, disparities still tend to increase over the course of the academic career);
- Female scholars have a lesser role in administration and governance (the latter largely as a result of their concentration in the lower ranks).

Current Status of Minority Faculty

Before proceeding to an examination of the current status of minority faculty, two initial observations are in order. First, the vast majority of studies have focused on black faculty (footnote: This is hardly surprising

since the proportionate representation of blacks in the academic profession is twice that of Asian Americans, and more than three times that of Hispanics and Native Americans). Second, while the majority of black faculty are located at black colleges, investigators have focused their attention on black faculty at predominately white colleges and universities. Therefore we know very little about black faculty at black colleges with the exception of Thompson's (1956) dated analysis of black college faculty and the work of Mommsen (1970, 1974) on black Ph.D.s, and Hayden's (1978) study of the purposes of black higher education as perceived by black college faculty.

With these observations in mind, what can we say about the current status of blacks in the academic profession at large? In 1960, before the civil rights movement, Rose (1966) counted some 5,900 black faculty across the country--about 3 percent of the academic profession. By 1975, blacks still constituted about 3 percent of a professoriate that had grown from just under 200,000 to nearly one-half million (National Center for Education Statistics, 1979). While the proportionate representation of blacks in the professoriate has remained stable, the past fifteen years have seen a considerable shift in their distribution within Academe. Black faculty have been historically concentrated in predominately black colleges in the south. As late as 1969, fully 75-85 percent were so located, depending upon whose estimates one chooses to take (Bryant, 1972; Mommsen, 1974; R. Freeman, 1978). During the first half of the 1970s the proportion of black faculty in black colleges decreased to about half, while the proportion in predominately white universities increased by 8 percent overall and by 12 percent at the most prestigious research universities. Moreover,

the shifts have been most pronounced among the youngest cohorts of black faculty (R. Freeman, 1978). Therefore, while two-thirds of black professors in the mid-1970s were still clustered at the lowest quality strata institutions (especially in black colleges) and significantly underrepresented in universities and private liberal arts colleges, there has been some movement toward a greater similarity in distribution with majority faculty, especially among the younger age cohorts.

Like academic women, black faculty in predominately white instiru-tions tend to be concentrated in a few select fields: Fully one-half are concentrated in education and selected fields of the social sciences (especially black or ethnic studies departments), while another one-quarter are evenly distributed between the humanities and the natural sciences. The older age cohorts tend to be more completely concentrated in education, while younger black faculty are more heavily concentrated in the social sciences and humanities (Rafky, 1972). Unlike academic women, however, there seem to be no major shifts in disciplinary distribution in the offing: The latest available data on the disciplinary distribution of black Ph.D. recipients (National Center for Education Statistics, 1979) shows a continued high concentration of blacks in education and the social sciences and reveals no increases in proportionate representation in other fields.

What of the status of the black professor at his/her own institution? Like academic women, black faculty tend to be clustered in the lower ranks, although the extent of that clustering appears to vary by institutional type and sex. Among the studies of black faculty in predominately white institutions only, the concentration in lower ranks is marked (Rafky, 1972;

Moore and Wagstaff, 1974); the proportion in part-time and non-tenured track positions is considerably higher vis a vis their white colleagues by ratio of about twenty to one; the likelihood of black faculty holding tenure is about one-half that for their white colleagues (Rafky, 1972; Moore and Wagstaff, 1974). Among those studies of black faculty at all institutions, the black-white rank discrepancy appears considerably smaller. Among males, there was no significant discrepancy, except at the full professor level, while among females, whites were more likely to be represented at the higher ranks (R. Freeman, 1978).

As a group, black faculty fare significantly better than academic women in matters of compensation. On the basis of American Council on Education 1972-1973 faculty survey data, Tuckman (1976) found no significant black/white salary discrepancy for males, while black female faculty earned significantly more than their white colleagues (on the order of $4,000 per academic year average). Supplementing the 1972-73 survey with the results of the earlier (1969) American Council on Education-Carnegie Council survey, Freeman (1978) largely corroborated Tuckman's findings. In a more detailed analysis, Freeman develops separate regression equations to determine the predictors of salary for black and white faculty. The predictors were largely similar for males, except for the differential impact of publication rate: Black male faculty who published extensively obtained a premium in the $2-3,000 range over equally productive white faculty, reversing the comparative disadvantage of the most productive black scholars that emerged from the 1969 data. This reversal would appear to suggest a shift in demand in the early 70s for more productive black male faculty. The comparative advantage of black female faculty

over their white colleagues emerged largely as a function of the differential impact of age, experience, and publication rate and institutional type: Black women gained on a par with majority males with increased experience while their white female colleagues lost; they also received a premium for publication similar to majority males, and did particularly well at community colleges and lower quality universities. (Footnote: Non-black minority faculty did not do as well. They are paid somewhat less than comparably productive white colleagues and showed no consistent improvement in compensation between 1969-1973). While no studies specifically examine the participation of black faculty in institutional or departmental governance, two studies look more broadly at black faculty participation in various aspects of institutional life. Anderson et al (1979), in their survey of forty-two black faculty and staff at the University of North Carolina-Chapel Hill uncovered a sense of relative isolation: A majority of respondents were the only black members of their department, did not feel close to their white department colleagues and felt that they were not regarded "as part of the team." This portrait of isolation is largely confirmed in Middleton's (1978) multi-institutional interview study of black faculty. While black faculty may play an important role in committees concerned with affirmative action and other black-related issues, they appear to participate less actively in the central policy channels of their institutions.

By way of summary, the following conclusions may be drawn about the current status of black faculty:

- Blacks as a group have made considerably less progress than women in infiltrating the academic profession, although they began in the 1970s to infiltrate predominately white institutions

on a larger scale than heretofore;

- Black faculty are concentrated chiefly in education and several areas of the social sciences, and while there is some broadening in disciplinary distribution among the younger age cohorts, this trend appears likely to continue;
- In terms of their institutional status, black faculty, like academic women, have tended to be concentrated in the lower ranks and isolated from a major role in institutional administration and governance;
- In the area of compensation, black faculty, especially females and the most prolific publishers, be_in to do quite well by the early 1970s.

How can we account for the differential status of women and black professors vis a vis majority males? Investigators have by and large explored two potential explanations: That differential status/treatment (1) may be a function of overt discrimination based on sex and/or race; or (2) may simply attend on differential performance, i.e. women and minorities as a group aren't as "productive" as majority males and therefore aren't as a group as rewarded.

Those who sought to explain differential treatment by differential performance do, however, make important distinctions in the bases or sources of the differential performance:

- Some would argue that women and/or blacks perform differently

because they choose to, i.e. as a group, they bring different values, orientations, and/or activity preferences (the results of differential early socialization) to their academic careers than majority males (e.g., for women, an orientation to cooperation rather than competition, to human relationships rather than academic tasks; for blacks, an orientation to action rather than to contemplation/abstraction); and those activitity preferences happen to be less rewarded by the academic system;

- Others would attribute performance differentials to differentials in educational background and training, suggesting that current performance patterns result from more subtle patterns of discrimination to which women and minorities have been subjected in their academic training as a result of their race and/or sex or their socio-economic background;
- Still others would attribute differential performance to the differential context within which the academic career is pursued by women and minorities vis a vis majority males. This differential context would include:
    a. The added social/cultural constraints on women and minorities pursuing professional careers--the stress of reconciling academic/professional with extra-work roles (e.g., for women, the stresses of combining work and traditional family roles; for blacks, the schizophrenia of relating to both of the academic and black communities); and
    b. The "token" status of women and minorities, i.e. the

pressures generated by being a deviant in a majority male dominated culture (v. Kanter, 1977-1979).

Our task now is to identify and weigh the evidence that has been generated in testing these competing explanations.

The Thesis of Overt Discrimination

Three principle sources of evidence are available to test the thesis of overt discrimination:

1. Studies of actual hiring decisions, focusing on interview/hiring rates for women and minorities vis a vis majority males and on the determinants/criteria employed in hiring decisions;
2. Studies of discriminatory attitudes on the part of majority males, including attitudes manifested in letters of reference and reactions to scholarly work as well as attitudes toward affirmative action; and
3. Studies of inequity in the distribution of salary, promotion and other rewards, including empirical analysis of the determinants of rewards for males and females, blacks and whites as well as studies of self-perceptions of discrimination among women and minority groups.

Hiring Decisions. Investigators have taken basically two sorts of approaches to the study of hiring decisions. The earlier studies (Simpson, 1970; Levin and Duchin, 1971; Fidell, 1970) sought to detect inequities via experimental simulations, i.e. requesting subjects who were usually department chairpersons, deans or members of faculty search committees to react to curriculum vitae, varying in the sex or race of the applicant. Two-thirds of these studies (Simpson, 1970; Fidell, 1970) did indeed detect discrimination: Males were

generally preferred over females, although this "male preference" was significantly lower among female employers and among the youngest and oldest employers; and when hypothetically offered a position, female applicants were less likely to be placed on the tenure track and more likely to be offered a lower rank. The negative case (Levin and Duchin, 1971) uncovered no evidence of discrimination among department chairmen in the physical sciences only. This suggests some variation in discriminatory attitudes by discipline--discrimination appears to surface more readily in the humanities and social sciences (those fields with relatively high proportions of women) and less readily in fields such as the physical sciences with the very lowest proportinate representation of women).

The later studies (Amsden and Moser, 1975; Shoemaker and McKeen, 1975; Steele and Green, 1976; Thornberry, 1978), focus explicitly on affirmative action and its impact on interview/hiring rates of women and minorities. Together, these studies permit a number of generalizations about the impact of affirmative action. In the first place, affirmative action increases the likelihood that institutions will carefully "look at" women and minority candidates although it does not significantly increase the likelihood that they will actually hire them. Shoemaker and McKeen (1975), for example, in a study of hiring at 191 colleges and universities advertising positions in the Chronicle of Higher Education reported that: (1) Qualified blacks and non-black minorities were significantly more likely than qualified white candidates (footnote: An equal proportion--about two-thirds--of both black and white applicants were considered to be "qualified") to be interviewed (20 percent of "qualified" black applicants versus 6 percent of "qualified" white applicants over all positions sampled) but (2) were significantly less

likely than white applicants to be hired as a result of the interview. About 6 percent of minority interviewees were hired as opposed to nearly 24 percent of white interviewees, although, overall, "qualified" minorities and whites were about equally likely to be hired (about 2 percent of the qualified applicant pool of both minorities and whites were ultimately hired).

Institutional pressure for affirmative action, by itself, then, does not significantly affect hiring rates of minorities; rather, the findings suggest that the effect of affirmative action on hiring is mediated by individual department circumstances i.e. the departments current "utilization index" (footnote: For affirmative action purposes, a department's utilization index is defined as the percentage women and minorities hired/the availability pool x number of full-time equivalent faculty in the department and provides a generally accepted indicator of the extent to which department hiring practices reflect the availability pools for women and minority group faculty) and its level of attrition among women and minority group faculty. Thornberry (1978), in a survey of ninety department chairs in two large state universities, found no significant difference in hiring rates by extent of institutional affirmative action pressures. Steele and Green (1976), however, in a case study of new hires at a public research university over a two year period, found that general affirmative action pressures are transformed at the department level by situational factors: (1) When department utilization is negative, the pursuit of women and minority candidates is stimulated (departments with a negative utilization index for women made 35 percent of all offers to women during the two year period under study although they constituted only about 12 percent of the availability pool); and (2) When utilization is positive, the extent to which a department pursues affirmative action depends upon

attrition among extant women and minority faculty, i.e., those departments with little or no minority attrition made but a single offer to minority candidates in the course of sixty-six searches and made less use of those "informal" recruitment procedures that are most effective in finding minority candidates, while those departments with high minority attrition made over one-quarter of all offers to minority candidates and persisted in "informal" avenues of recruitment. It would appear that once compliance has been achieved (i.e. operationally defined as a utilization index greater than or equal to zero), women and minority candidates were pursued only when a vacancy was created by the loss of another woman or minority faculty member. Departments, then, tended to single out a small proportion of positions for allotment to women and minorities, and once these were filled, to abandon the pursuit of women and minority candidates, regardless of the number of positions that subsequently become available. (Footnote: In the case of minority faculty, in particular, there is the further problem of determining the availability pool upon which utilization indexes are calculated. Unlike academic women, no national organization, e.g. the National Research Council, maintain data on the disciplinary distribution of minority Ph.D. recipients. In current institutional practice, the availability pools of minority candidates tend to be calculated on the basis of annual Ph.D. conferrals by a handful of the most prestigious research universities--thus effectively excluding from their availability estimates doctorates conferred by Howard University and other major producers of black Ph.D.s. Current practices, thus, tend to underestimate the availability pool of minority candidates and, thus, indirectly contribute to inequities (Steele and Green, 1976)).

If differential treatment of women and minority candidates is manifest in the results of the hiring process, Steele and Green (1976) provide additional evidence on the operation of differential treatment in the process of evaluating candidates itself. Following up on their study of hiring decisions, they examined the hiring criteria that department chairpersons applied to unselected minority and white candidates. Specifically, they examined the importance assigned by department chairs to each of twenty-five hiring criteria as well as the ratings on each criterion of unselected candidates. For unselected minority candidates, the majority of correlations between the rated importance of each criterion and the rating of each candidate on that criterion were negative, i.e. on those dimensions rated most important, minority candidates were rated lowest, while on those dimensions viewed as less important, minority candidates were rated higher. This was emphatically not the case with unselected white candidates. It would appear that the standing of unselected minority candidates on these hiring criteria changed the importance assigned to these criteria so as to emphasize candidates liabilities and underplay their assets. (Footnote: It should be noted that these findings are based on the responses of only five department chairpersons and may, in fact, reflect defensiveness at the line of questioning rather than an actual bias operating during the hiring process).

Less directly, the differential evaluation of faculty candidates based on sex and/or race is reflected in several content analyses of letters of reference written on behalf of job candidates. Hoffman (1972), in a study of letters of reference prepared by members of the Modern Language Association, detected blatant sexism in the references to physical appearance, marital/parental status, sexual preference, participation in the women's movement or

womens studies that found their way into letters written in behalf of women candidates but not those written in behalf of men. Guillemin, Holstrom, and Garuin (1979) in a content analysis of letters of reference written on behalf of candidates for a junior position in sociology at a northeastern university uncovered sex differences in the appraisal of career performance and potential: Female candidates were less often described as "capable of serious work," and were more frequently referred to as "students" rather than "faculty"' the letters written on behalf of females made fewer references to "intellect" and contained fewer superlatives. While these letters, to be sure, directly reflect the values/orientations of the writers rather than the employers, we can assume that referees are attending to those characteristics they believe are of interest to employers, i.e., they are writing for an audience as they perceive it.

Not only do academics attend to different characteristics in evaluating women and minority group candidates for academic employment, there is even some evidence that the ascriptive characteristics of sex and/or race effect the evaluation of scholarly work itself. Goldberg (1968) asked college students to rate pairs of scholarly articles, differing in the sex of the author. Fully 80 percent of the comparisons favored male authors. And that favorable bias tended to be exacerbated in judging scholarly work in the traditionally masculine fields, e.g. law, linguistics, and city planning.

Salary Discrimination. Differential treatment accorded in the hiring process appears to extend into the actual work situation as well--most notably in the area of salary. We have already noted that academic women as a group earn about 20 percent less than male academics. In an effort to determine whether salary disparities are attributable to sex discrimination or other

factors, investigators have sought to control predictor variables other than sex that might explain salary differences. Specifically, they have developed separate regression equations to predict male and female salaries. Collectively, the findings of these studies suggest:

1. Controlling for academic rank, research productivity, and experience, academic women still earn considerably less than men (Bayer and Astin, 1975);
2. The salaries of male academics are more "predictable" than that of female academics. Tuckman (1976) was able to account for 55 percent of the variance in male faculty salaries but only 32 percent of the variance in the salaries of academic women. Similarly, Bayer and Astin (1975) were able to account for nearly half the variance in male faculty salaries as compared with nearly 10 percent of the variance for academic women. It would appear that more "intangible" factors are operating in the salary determination process for women;
3. While in 1969, there was a high degree of similarity in the predictors for male and female faculty, by 1973 considerable male-female differences in salary determinants were emerging (Bayer and Astin, 1975). These findings suggest that the criteria for salary determination may be in the process of change or reallignment or that they are not being uniformally applied to men and women. Table 6 below, based largely on Tuckman's (1976) analysis, highlights the major salary determinants that show differential impacts on academic men and women:

TABLE 6

Differentials in the Salary Determinants for
Male and Female Faculty

a. Research productivity--1969: Males received a higher return on publication (Bayer and Astin, 1975)

   1973: Females receive a higher return for article publication (Tuckman, 1976).

b. Career age/experience--females receive a lower return for experience than males (Tuckman, 1976).

c. Public service/administration--males receive a 100 percent higher return on public service activities and a 50 percent higher return on administrative activities.

d. Prestige of institutional affiliation--higher return to males than females (Tuckman, 1976).

e. Field--male-female disparity highest in the professions and lowest in natural sciences/engineering.

f. Highest degree--Ph.D. brings significantly higher return to females (Bayer and Astin, 1975; Tuckman, 1976).

g. Ph.D. prestige--significantly more important predictor for males than females (Bayer and Astin, 1975).

What do these differences mean? An examination of Table 6 suggests that females are most rewarded in the areas of their relative weakness: While female academics are half as likely as their male colleagues to hold the Ph.D., publish less, and are notably scarce in the natural sciences, they are rewarded for possession of a doctorate, publication, and for choosing the natural sciences as a career. Males, on the other hand, are rewarded most heavily in precisely those areas of their greatest comparative strength

vis a vis academic women: They are more likely to publish, discharge administrative responsibilities, engage in public service, and they receive a premium over academic women for so doing. Similarly, they are more likely to be married and affiliated with more prestigious institutions, and receive a premium over academic women for so doing. It would seem fair to conclude, then, that current academic compensation practices tend to recognize male strengths and female weaknesses, i.e. they are defined in terms of male strengths.

Discrimination and the Allocation of Other Rewards: Academic Women. In terms of the likelihood of gaining an appointment at a prestigious university, six out of seven investigators (Rossi, 1970; Morlock, 1973; Cole and Cole, 1973; M. Patterson, 1971; Baldridge, et al 1978; Cole and Cole, 1979) reported that academic women were significantly less likely than academic men to be at "top" departments (however "top" might be measured), even after controlling for highest degree, Ph.D. prestige (Morlock, 1973) and for research productivity (Cole and Cole, 1973 and 1979). Patterns of disciplinary differences did, however, emerge: Females tended to do better in some fields, e.g., sociology and biology, than in others, e.g., chemistry and psychology (Cole and Cole, 1973 and 1979; Rossi, 1970). Moreover, the evidence presented by Cartter (1975) suggests that by the mid-1970s academic women had begun to do better at the entry level. The sole discrepant findings, reported by Menninger and Rose (1978), may indeed be attributable to this shift at the entry level: Their data, collected in 1976, is the most current available and may merely reflect this entry level shift. Their discordant note may also, however, be a function of their failure to distinguish between women in faculty positions and those in research and/or other professional positions.

Their findings may thus reflect a concentration of females in the least prestigious jobs (postdoctoral and/or research associate positions) at the more prestigious institutions.

In the matter of rank, receipt of professional honors, and reputational standing (visibility and perceived quality of work), sex appears to be significantly less of a disadvantage. Bayer and Astin (1975) reported a small significant sex effect on the attainment of higher rank (partial correlation in the neighborhood of .15). Cole and Cole (1973 and 1979) found that females were only slightly less likely to receive professional honors, although the magnitude of the disadvantage varied considerably by discipline (from none in biology to a partial correlation of 0.19 in chemistry). They further reported only the most minor independent effect on reputational standing (beta equals -.05). In both the receipt of honors and reputational standing, the lion share of any sex effects proved attributable to male-female differences in research productivity. The clear and large disadvantage of sex in matters of compensation, then, remains, albeit less strongly, in matters of promotion, and virtually disappears in the allocation of professional honors and the recognition of one's peers.

Discrimination and the Allocation of Rewards: Black Faculty. No multivariate analyses of the impact of race on promotion and the distribution of professional honors and recognition are available. The analysis of the impact of race on compensation (v. supra) suggests that in matters of salary, racial/ethnic minority status is considerably less of a disadvantage than sex.

Self Perceptions of Discrimination. Beyond the data on actual discriminatory behavior, there is the evidence provided by women and minorities

themselves on their self-perceived status. In the case of academic women, Berwald (1962) and Crim (1978) reported a pervasive sense of limited opportunity. Ladd and Lipset (1978) uncovered significant sex differences in views concerning discrimination as opposed to perceptions of the current status of academic women. While 90 percent of both male and female faculty agreed that women scholars are proportionately underrepresented in colleges and universities, fully two-thirds of the women agreed, and nearly 60 percent of the men disagreed, with a statement suggesting that appeals to the concept of "merit" merely constituted a "smokescreen for discrimination." While apparently conceding the obvious, academic men are reluctant to attribute it to their own discriminatory behavior.

In the case of black faculty, the findings of Moore and Wagstaff (1974) and Rafky (1972) suggests that a large proportion of black academics in predominately white colleges and universities feel that blacks are sometimes "excluded" and discriminated against, even if they are well qualified. The perceptions of discrimination, however, appear to be mediated by institutional type, age, and faculty qualifications. Rafky (1972) found perceptions of discrimination to be highest among the least qualified faculty and among faculty at lower quality strata institutions and correspondingly lowest among the best qualified faculty and faculty at higher tier institutions (among which younger faculty are disproportionately represented). And indeed, Elmore and Blackburn (1980) found an overall perception of equity among their sample of well qualified and well located black faculty at the big ten universities--further evidence of the relatively advantageous position that highly productive black faculty began to find themselves in in the early and mid-1970s.

By way of summary, what can be said of the case for overt discrimination? In the first place, the evidence clearly suggests overt discrimination in the hiring process in so far as "tokenism" (the designation of a few token slots reserved for women and minorities) operates and differential evaluation criteria are applied to women and minority candidates. Although affirmative action pressures appear to be moving women and minority group hiring ratios in line with availability pools, newly entering females appear to have the edge over racial/ethnic minorities--if for no other reason than the latter's uncertain availability pools. Academic women are being subjected to clear and large inequities in compensation, and to a lesser extent, in promotion, while they have achieved near equity in the allocation of professional honors and peer recognition. Black faculty, on the other hand, while not subject to the same inequities in compensation, have not been increasing in proportionate representation in the academic profession during the 1970s. While the objective evidence and the self reports indicate a relatively advantageous position for the most productive black faculty, the "average" black faculty member at predominately white institutions appear to be a relatively scarce commodity, concentrated in the lower ranks, and decidedly isolated.

The Thesis of Performance Differentials

While, then, a considerable portion of the current status of academic women and minorities is clearly attributable to overt discrimination, there is considerable evidence as well that their current status may be attributable to differences in the type of work performed and to differential levels of performance and productivity.

Differences in Type of Work Performed. Academic women spend more time teaching (Astin and Bayer, 1972; P. Patterson, 1974; Simon and Rosenthal, 1967; Centra, 1974; B. Freeman, 1977; Baldridge et al, 1978) and specifically, more time teaching undergraduates (Bayer and Astin, 1972; Baldridge et al, 1978) and less time teaching graduate students (Bayer and Astin, 1972; B. Freeman, 1977; Baldridge et al, 1978). (Footnote: The largest male-female differences occur at the high end of the spectrum. Thus, while male and female academics are about evenly distributed at the low and mid-range of the teaching load continuum, academic women are much more likely than men to be teaching more than nine hours--nearly two-thirds of the women as compared to less than half of the men (Bayer and Astin, 1972; B. Freeman, 1977)). Their teaching is more concentrated in small classes, while male professors are more likely to teach large lecture sections (Bayer and Astin, 1972). Academic women spend concomitantly less time in research--they spend about half as much time in research (Baldridge et al, 1978) and are twice as likely as males to spend no time whatever in research (Eckert, 1971)--and less time in administration--male faculty are nearly twice as likely to hold administrative positions (Centra, 1974). There is some evidence of variation in the extent of this work activities disparity by institutional type. While Bayer and Astin (1972) reported that the differences held firm across all work settings, B. Freeman (1977) found that male-female differences were somewhat attenuated at the highest quality institutions, e.g. the research universities (less than a 10 percent disparity). This suggests that the overall male-female work activity disparity may be a function of the higher concentration of females in the less research oriented universities and comprehensive colleges.

In the case of black faculty, Moore and Wagstaff (1974) report that (1) nearly two-thirds are limited in their teaching to undergraduates only (2) nearly four-fifths spend 15 percent or less of their time in research and (3) black females tend to have higher teaching loads than black males and spend very little time on research. When black and white professors are compared directly, however, racial differences in the distribution of work effort disappear. Rafky's (1972) sample of black faculty in predominantly white universities was equally likely as a comparison group of white faculty to report research and administration as their major activities; and Elmore and Blackburn (1980) reported their samples of black and white faculty at big ten universities to be about equal in time devoted to teaching, research, and university service. There are conflicting findings on the role of black faculty as student counselors: Rafky (1972) found black faculty to be significantly more involved in student academic/personal counseling than their white colleagues, while Elmore and Blackburn (1980), did not. This may be a function of a more limited counseling role played by black faculty at major research universities (Elmore and Blackburn, 1980); or a function of a shift in the role of the black professor over time-- as educational opportunity centers and other structures that provide services to minority students have developed over the past decade, they may have relieved black faculty of some of their student counseling burden.

Beyond teaching, research, and administration, women and minority faculty appear to be less involved in off-campus professional activities. Cameron (1978) reported that academic women were significantly less likely than their male colleagues to have developed strong professional network ties; and Bayer (1973) found academic women less likely to spend time off campus in professional

activities. Morlock (1973), examining over thirty studies of faculty in fourteen disciplines, reported that academic women were less likely to participate in national meetings and to hold professional association offices or journal editorships. Rafky (1972) reported similar findings for black faculty at predominately white institutions.

This lowered off-campus professional participation is reflected in patterns of colleagueship and collaboration. Kaufman (1978) found that academic women were significantly less likely than men to separate friendship from colleagueship and tended to include in their colleague networks friends with whom they shared no professional interests. And this distinctively social concept of colleagueship is reflected in patterns of collaboration in research and publication. Cameron (1978) found that while academic women were as likely as males to collaborate on research, they tended to limit their collaboration to a very few colleagues with whom they worked more intensively. Males, on the other hand tended to work with a much larger network of different collaborators, interacting on a more task-specific basis. Thus, although females are no more likely than males to be married to academics (Bayer, 1973), females were more likely to collaborate with their spouces-- a "primary" tie. And when academic women do collaborate with their male colleagues, they tend to accept second authorship nearly two-thirds of the time (Wilkie and Allen (1975).

The picture that emerges of black faculty, based to be sure, on limited evidence, is one of relative isolation from their white colleagues and the search for professional and social support from other blacks. While the collaboration rate of black faculty approaches the norm (over one-half had not co-authored publications with colleagues, Moore and Wagstaff,

(1974), Middleton's (1978) findings suggest that the nature of that collaboration is rather distinctive: Many black faculty tend to look to a different set of colleagues beyond their department, i.e. other black faculty in the same or related fields who effectively form a "black network." And these findings are echoed by those of Anderson's (1979) case study of faculty at a major public research university.

In the area of paid consulting, academic women appear to be at a greater disadvantage than black faculty. Bayer (1973) found that women scholars were only two-thirds as likely as men to have engaged in paid consulting, with the disparities greatest at the university level. Elmore and Blackburn (1980), on the other hand, found no significant differences in consulting among black and white faculty at the university level.

Differences in Research Productivity and Performance: Academic Women. Female academics are not only significantly different from their male colleagues in what they do, but in how productive they are in their work. The results of some two dozen studies in the last decade provide overwhelming evidence that males outpublish females across all types and quality strata of institutions by as much as two or three to one (Fulton, 1975; Ladd and Lipset, 1976; Baldridge et al, 1978; Hall and Blackburn, 1978). Whether focusing on cumulative production or publication rate, one dominant pattern emerges again and again (Astin, 1973; Centra, 1974; Weidman and Weidman, 197 ; Fulton, 1975; B. Freeman, 1977; Astin, 1978; Cameron, 1978 and 1981): Men are significantly overrepresented at the highest levels of productivity (i.e., a significantly higher percentage of academic men publish prolifically); females are disproportionately represented at the lowest productivity levels (i.e. academic women are disproportionately found among non-publishers);

academic women are either similar to (Astin, 1973; Centra, 1974; Weidman and Weidman, 197 ; B. Freeman, 1977), or significantly higher than (Fulton, 1975; Astin, 1978; Cameron, 1978), males in their proportionate representation among moderate level publishers. Thus, while academic women are significantly more likely not to engage in publication; when they do, they are more likely to be moderate rather than prolific in their publications.

A sizeable portion of this publication disparity seems to be attributable to academic women's "weaker" position on a constellation of correlates of research productivity: They are less likely to at the higher quality strata institutions and at research universities, less likely to be found in the higher ranks, less likely to be found in the most productive disciplines (e.g. the natural sciences). Although most studies control for one or more of these factors, and none controls for all of them, there nonetheless remains some kind of residual, independent sex effect--an effect that varies considerably from study to study (depending, in part, on the number of control variables examined). Controlling for only one or two of these yields partial correlations of a magnitude of 0.35 (e.g. Cole and Cole, 1973 and 1979, controlling for institutional type and quality). Simultaneously controlling for most in a multiple regression analysis yields beta weights of a magnitude of 0.10 (Hall and Blackburn, 1978).

While the male-female publication disparity, then, tends to withstand the scrutiny of multivariate analysis, it does show marked fluctuation--most notably, by discipline. The disparity is lowest in the natural sciences (Folger, Astin, and Bayer, 1970) and in some of the social science disciplines, especially sociology (Cole and Cole, 1979). Indeed, examining publication rate, Fulton (1975) found that the proportion of prolific publishers among

women in the natural and social sciences was fully two times higher than that for the sample as a whole. And Centra (1974) reported almost no disparity in cumulative publication among physical and biological science doctorates.

Several studies have further documented fluctuation in the disparity over the course of the academic career: The initial disparity is small, but begins to measureably widen about five-ten years after receipt of the doctorate (Converse and Converse, 1971; Cole and Cole, 1973; Centra, 1974); and that attenuated mid-career disparity appears alternatively to narrow by about the twentieth year after receipt of the Ph.D. (Converse and Converse, 1971; Centra, 1974) or to steady out (Cole and Cole, 1973; Centra, 1974) depending on the type of institution with which a faculty member is affiliated (Centra detected a narrowing among college faculty, and a "steadying out" among university faculty) or their disciplinary affiliation (Cole and Cole's sample of natural scientists displayed a "steadying out" pattern). The pattern of a "narrowing" disparity over the course of the academic career is reflected (in combination with a "selection" factor), to some extent, in the finding of a significant rank effect. Fulton (1975), and Astin, (1978), in a secondary analysis of the 1969 Carnegie-American Council on Education Faculty Survey, found the publication disparity declining as faculty ascended the heirarchy of academic ranks: With increasing rank, the proportion of female "inactives" declined, approaching parity with males at the full professor level; while the proportion of moderate female publishers substantially increased (there was, however, no substantial reduction in the disparity at the highest levels of publication prolificness).

The disparity in publication productivity is replicated in women academic's performance in "grantsmanship" (grantpersonship). Simon and Rosenthal (1967), Bayer (1973), and Ladd and Lipset (1978) found academic women significantly less likely to receive research grants across all types of institutions. Moreover, when they do, they are less likely than their male colleagues to be principal investigators. Bayer (1973) found that while one-third of the female academics in his sample had received some grant, only about one-eighth of the sample were serving as principal investigators compared to nearly one-third of the men. (Footnote: Cameron (1978) found virtual parity between males and females in her sample in the proportion receiving one or more grants and in the average number of grants received over a three year period. Her findings may reflect the effort of federal agencies during the latter half of the 1970s to be more self-consciously "evenhanded" in their distribution of grant funds. Or, their findings may merely reflect the exclusion of faculty in the natural sciences from her sample--that group who are most likely to receive grants and who are simultaneously least likely to count academic women among their ranks).

Differences in Research Productivity and Performance: Black Faculty. Three of the four available studies (Rafky, 1972; Moore and Wagstaff, 1974; R. Freeman, 1978) found a pattern of black-white disparity in publication productivity similar to that between male and female faculty. Rafky (1972) found that black faculty in predominately white colleges and universities were significantly more likely to be "non-producers" and significantly less likely to be "high producers" -- while about equally likely as white faculty to be "moderate" publishers. And R. Freeman's (1978) secondary analysis of

the 1969 and 1972-73 Carnegie-American Council on Education Faculty Survey data found that white faculty outpublished black faculty by a ratio of two to one when faculty at the black colleges were excluded. The sole discrepant findings are advanced by Elmore and Blackburn (1980) who found no significant productivity differences between black and white faculty at the big ten universities. The failure to find a significant difference may be an artifact of their relatively small sample size (eighty-one black and ninety-two white faculty), or, alternatively, it may reflect the increased demand for highly productive black faculty noted by R. Freeman (1978) in the early and mid-70s who were then "selected" to the big ten universities.

The Teaching Effectiveness of Academic Women. If academic women are less involved and less productive in research, in the area in which they focus the lion share of their effort--teaching--they appear to be no more effective overall than their male colleagues. Among a dozen studies that examine the relationship of instructor's sex to student ratings of teaching effectiveness, five reported no significant differences (Choy, 1969; Katz, 1971; Ferber and Loeb, 1973; Ferber and Huber, 197 ; Barnett and Littlepage, 1979). Four additional studies yield non-significant findings overall; however, they report significant differences either (1) on only a few teacher rating instrument items or (2) for certain disciplines and not others. No clear pattern emerges from the items that do yield significant sex differences. And only one item yielded significant differences in more than one study: Both Wilson and Doyle (1976) and Elmore and LaPointe (1974-1975) found that male faculty were more highly rated in matters of "clarity" of presentation and speaking. A clear pattern does, however, emerge for disciplinary differences: Female faculty were rated higher in the traditionally "female"

disciplines (e.g. home economics) and lower in the traditional masculine disciplines (e.g. engineering and agriculture) (Kajander, 1976; Ferber and Huber, 197). It would be a mistake, however, to overstate these differences for, while they attain statistical significance, they are generally quite small and explain by themselves only very minute portions of the variance in teaching effectiveness ratings.

That academic women are not rated better teachers overall may nonetheless mask their particular efficacy with some groups of students. Tidball (1979) and others have suggested that female faculty are particularly effective as "role models" for female students. It may be, then, that they are more effective teachers for female students. This hypothesis has been tested in several recent studies of the interaction effect of instructor x student sex on teaching effectiveness ratings. While three out of five studies show no significant interaction (Elmore and LaPointe, 1974 and 1975; Wilson and Doyle, 1976), two of the five studies do. Ferber and Huber (197), in a study of faculty of the University of Illinois, found that while male faculty were similarly rated by male and female students, female students tended to rate female faculty much higher than male students rated these same faculty, and significantly higher than they rated male faculty. These findings are corroborated by Mackie (1976) in a study of student ratings at the University of Calgary. They are, however, difficult to interpret. The negative evidence (Elmore and LaPointe, 1974 and 1975; Wilson and Doyle, 1976) is furnished by studies of faculty in the humanities and social sciences, while the positive evidence (Mackie and Ferber and Huber) is furnished by studies of faculty in home economics, agriculture, physical education and sociology. The "peculiar" efficacy of female faculty for female students

may therefore vary considerably by discipline. Moreover the generlizability of the findings of all of these studies is clouded by the nonrandom sampling of faculty within sex groups (they simply use all available courses that have both male and female instructors). The male and female faculty evaluated can in no way be viewed as representative of male and female faculty even at the single universities from which the course evaluations were drawn. And, finally, except for Wilson and Doyle, none of the studies control for course level, instructor rank, format, content area--all variables beyond sex that may be effecting student ratings in unpredictable ways. It would appear that, at least at this point in time, no robust inferences can be made.

How we interpret these performance differentials--whether they can be seen to justify the differential status of women and minorities in Academe--depends to what we choose to attribute them. To the extent that they result from the free choice of participants according to their preferences (these preferences, to be sure, may be influenced by differential socialization), then performance differentials may indeed justify differential treatment (provided, of course, we are willing to accept the biases of the extant academic reward system). To the extent, however, that they are attributable to inequitable training opportunities or to externally imposed constraints on the academic career, then performance differentials may merely mirror inequities in the larger society. We therefore turn now to an examination of the evidence bearing on the sources of women and minorities performance differentials.

The Thesis of Choice

Jessie Bernard (1964) was among the first students of academic women to suggest that their status within Academe was, to a considerable extent, a matter of choice. Women, she claimed, by virtue of their prior socialization, were more oriented to the "teacher" versus the "man-of-knowledge" role, to the socio-emotional (nurturant) aspects of working with students rather than the cerebral, competitive tasks of research. And, to a considerable extent, she argued that it was these differences in orientation that lead female faculty to choose less rewarded academic activities and self select themselves to those types of academic institutions (teaching-oriented colleges) that permitted them to most freely pursue their preferences.

To what extent does the evidence support this position of inherent male-female differences in orientation and activity preferences resulting from prior socialization? Perhaps the strongest evidence is provided by the sizeable sex differentials in the goals faculty ascribe to their undergraduate teaching. In the 1972-1973 American Council on Education Faculty Survey, 20 percent more females than males endorsed student emotional development, helping students achieve deeper levels of self-understanding, and preparation of students for family living as goals of their undergraduate teaching; 10 percent more females than males endorsed development of moral character, development of responsible citizens, conveying a basic appreciation of the liberal arts, and provision of the local community with skilled human resources as goals of their undergraduate teaching. These sex differences are largely replicated in faculty ratings of the importance of the educational goals of their institution, although the size of the differentials is somewhat attenuated. Moreover, these sex differences, by and large, hold

across institutional types at the same level of magnitude (although absolute percentages are slightly lower at the universities). It would appear, then, that these sex differences persist regardless of insitutional context and cannot be ascribed to differences in the distribution of academic women over institutional types (i.e. their preponderance in the more teaching oriented institutions).

The "peculiar" orientation of women academics as a group is further reflected in their tendency to endorse teaching effectiveness, rather than publications, as the primary basis for promotion (Bayer, 1973; Tidball, 1976; Ladd and Lipset, 1978). Indeed, it is academic women in the universities who are nearly twice as likely as the sample as a whole to endorse teaching effectiveness over publications as a basis for promotion, suggesting that female faculty feel even more strongly about the importance of teaching effectiveness at those institutions where it is most challenged by the research ethic (Bayer, 1973). It is not surprising, then, that female faculty as a group proclaim themselves more oriented to teaching than research. Ladd and Lipset (1978) found that 11 percent fewer academic women than men indicated a primary interest in research. Even among the youngest age cohorts, while the absolute proportion preferring research rose slightly, fully 15 percent fewer women than men indicated a preference for research. And these sex differences in research orientation held across institutional quality strata and, with the exception of faculty in the social sciences, across academic fields. (Footnote: The greater orientation toward research among female social scientists may be related to the fact that they also turn out to be much more committed to the ideology of the women's liberation movement than their colleagues in other fields. Perhaps as a result, they have also

rejected other traditional feminine orientations, which have been reflected in the preference of female academics for the less competitive person-related teaching role (Ladd and Lipset, 1978)). Moreover, even among those female faculty who are more research oriented, we find significant sex differences in the character of the research they undertake. Academic women were significantly less likely to undertake "pure/basic" research and significantly more likely to pursue "literary or expressive" (Bayer, 1973) or "soft/qualatative" (Ladd and Lipset, 1976) approaches.--And it is the pure or basic research orientation that is most significantly associated with high research productivity (Astin, 1978).

The evidence supporting racial/ethnic differences in teaching orientation is considerably sparser than that for sex. While Hayden's (1978) study of the educational goals of minority faculty in black colleges and black studies programs draws no direct comparisons with white faculty, her findings do suggest racial/ethnic differences in the nature of faculty educational goals. These black faculty rated as least important the goal of "assimilating the student into the dominant culture," while they heartily endorsed goals such as "preparing the student to help promote an economic system that is cooperative rather than competitive," "developing a commitment to serve the black community," "fostering racial solidarity," and "enhancing the self-concept of the student". While it is not clear to what extent black faculty at predominantly white institutions outside of black studies would support these latter goals, it does seem fair to conclude that a significant group of black faculty orient their teaching activity to goals that would not be of the highest priority to majority male faculty.

Another arena in which free choice influenced by early socialization may be operating is in the distribution of faculty by discipline. In our earlier discussion of the status of academic women (v. page 5), we noted a historic pattern of "segregation" by discipline: While scarcely represented among faculty in the natural sciences and in the more quantitative fields (e.g. engineering, economics and business), fully half of all female faculty were teaching in a cluster of historically "feminine" fields--the performing arts, education, library science, health related professions, and English and modern languages. While the proportion of females enrolled in graduate school increased dramatically during the 1970s (from

percent to nearly 45 percent of all graduate students seeking degrees--National Center for Education Statistics, 1979), changes in pattern of "segregation" by discipline have been only slight in comparison. While female graduate students were by 1977 increasingly drawn to law, economics and the physical sciences (chemistry rather than physics), their representation among graduate students in engineering was actually declining, and in agriculture/natural resources, they continued to be heavily concentrated in the "food sciences." Moreover, women continued to constitute a majority of the graduate students in education, the health professions, English, foreign languages, and library science (Ladd and Lipset, 1978; National Center for Educational Statistics, 1979). These continued sex-related variations do not appear to result from admissions barriers. A study of graduate school admissions at the University of California at Berkeley, cited by Ladd and Lipset (1978), revealed that women tended to apply to departments with a high ratio of applicants to places, largely those that did not require mathematical preparation. As the authors of the study

pointed out: "Women are shunted by their socialization and education toward fields of graduate study that are generally more crowded, less productive of completed degrees, and less well funded, and that frequently offer poor professional employment prospects" ( ).

Black graduate student enrollments display a similar pattern to that of women--except that there has been no appreciable swelling of black graduate student enrollment during the decade of the 1970s. By 1977, blacks continued to constitute only about 3 percent of all Ph.D. recipients and continued to "segregate" themselves into a few fields: education, a few of the social sciences and humanities (National Center for Educational Statistics, 1979).

One final note on the issue of sex and race related differences in faculty orientation to cooperation versus competition. While we have no direct evidence on the attitudes of women and black faculty toward competition, several studies offer suggestive findings. Bayer (1973) solicited faculty perceptions of their relative career success compared to male and female colleagues in their field with comparable training. He found that while male faculties perception of their career success was largely independent of the sex of their comparison group, female faculties perception were not, i.e., female faculty tended to compare themselves favorably with their female colleagues, but much less favorably with their male colleagues. While these sex differences may merely reflect the reality that males are more likely than females to receive the tangible rewards (e.g. promotion, affiliation with a prestigious institution, and higher salaries) associated with career success, they may also reflect a disinclination on the part of women academics to "compete" with their male colleagues. Middleton (1978)

reported that some young black faculty had "become discouraged by the pressures of working in white institutions and voluntarily have gone back to black colleges or left higher education altogether." To what extent such withdrawal represents a response to the harsh economic realities of the academic profession during the late 1970s or a more general disinclination toward the competition for promotion and tenure is not clear.

Differences in Training and Educational Background

Female faculty defy the law of the positive influence of social class on academic careers: That is, higher socio-economic background tends to be associated with attendance at more prestigious baccalaureate and graduate institutions which is, in turn, associated with more favorable placement in the academic stratification system (v. Crane, 1969 and Studies of the Impact of Ph.D. Prestige on the Prestige of Institutional Affiliation). They have historically come to an academic career from higher socio-economic backgrounds than male academics (Bernard, 1964; Astin, 1969) and continue to do so (Strober, 1975; B. Freeman, 1977; Ladd and Lipset, 1979)--indeed, younger female faculty come from the most privileged backgrounds in the entire profession; and yet, they have been unable to translate the advantages of their background into status within the academic profession.

What intervenes between socio-economic origin and career entry to attenuate the effect of socio-economic origin? Since academic women do not differ appreciably from their male colleagues in the prestige of their baccalaureate or graduate institutions, the most obvious factor appears to be sex-related differences in the attainment of the doctorate. Through the early 1970s, academic women have been about half as likely as their male colleagues to hold the Ph.D. (Eckert, 1971; Bayer, 1973; Morlock, 1973; Kane, 1976;

Baldridge et al, 1978); and possession of the doctorate is importantly associated with teaching in universities rather than colleges, publication, and salary and promotion (Blau, 1973; Finkelstein, 1978

). However, if male-female differences in attainment of the doctorate was the major determinant of male-female status disparities, one would expect non-Ph.D. males to be as bad off as non-Ph.D. females--and this is decidedly not the case. The 1970 Modern Language Association Commission on the Status of Women found that more men without the doctorate reached the rank of full or associate professor than women. And data from the American Council on Education 1972-1973 Faculty Survey corroborate this finding: Male faculty without the Ph.D.--some 25 percent of the male faculty sample--were distributed nearly evenly over the ranks of assistant, associate, and full professor, while non-doctorate females--just over half the sample of academic women--were heavily clustered at the assistant professor level. These data, no doubt, overestimate the sex effect since they do not take career age (years of experience) into account--the proportion of academic women in the "under thirty" age category is nearly twice that for academic men and one would expect this entry-level group to be clustered at the lower ranks. Overall, however, the age and experience distribution of male and female faculty is quite similar (Bayer, 1973) (and only about 5 percent more females than males are just embarking on their service in the academic profession); so that the disadvantage of the academic women appears to persist, irrespective of the terminal degree issue.

What background factors beyond mere possession of the Ph.D., then, contribute to the relative disadvantage of academic women? There is evidence of sex-related inequities in several components of graduate training that

investigators have found to be associated with later performance and career success (Crane, 197 ; Cameron, 1978 and 1980). Graduate assistantships in teaching and research provide an opportunity to work closely with a faculty member outside the classroom; and, especially in the latter case, provide an opportunity for the development of research skills and for early publication (the major determinant of later career publication productivity--Clemente, 1974; Finkelstein, 1978). It is these very sorts of opportunities that are conducive to the development of a "mentoring" relationship with a faculty member who may then serve as sponsor in the early stages of an academic career--a critical factor in gaining access to the best academic positions (Cameron, 1978; Blackburn, Chapman, and Cameron, 1980). Yet, academic women at all types of institutions were only half as likely as men to have held research assistantships and two-thirds as likely as men to have held teaching assistantships (Bayer, 1973; Centra, 1974; Strober, 1975; B. Freeman, 1977). Moreover, both Sell (1974) and B. Freeman (1977) found that academic women at research universities were significantly less likely to report having a faculty sponsor in graduate school. That likelihood, however, varied considerably by discipline--with the disparity approaching zero in the case of social science faculty, that very group which shows no sex-related disparity in research orientation and productivity (Ladd and Lipset, 1979).

There is at least one sign that the gap may be narrowing: Cameron (1978) in a 1977 study uncovered no sex-related differences in graduate school sponsorship. Her negative findings may be attributable to particulars of sample size and composition: The small sample size would require very large disparities to attain statistical significance and the preponderance

of social science faculty would tend to narrow any sex-related disparities. They may also, however, be attributable to changing attitudes and practices in graduate education: Cameron collected her data fully five years after Sell and Freeman, following a period which saw both increasing pressures for affirmative action and a rise in female graduate school enrollments. Nonetheless, for most current female faculty, trained in the first half of the 1970s or earlier, the evidence suggests sex-related differentials in training opportunities precisely in those aspects of graduate education associated with initial job placement and later productivity. And, all of this quite beyond any sex differences in the likelihood of Ph.D. attainment. (Footnote: The issue remains, of course, as to what extent these sex differences owe to the operation of preferences--i.e., women self-selecting themselves out of research assistantships and into teaching assistantships, in which they achieve near equity with men--or discrimination on the part of graduate faculty.)

If women faculty defy the law of socio-economic status and academic careers, black faculty at predominantly white institutions conform to it--with a vengeance. Black faculty are twice as likely as their white colleagues to come from low socio-economic origins, with younger black faculty even more likely to do so than their older colleagues (Rafky, 1972). At the baccalaureate level, the top ten producers of black faculty are all black colleges, with younger black faculty more likely to have attended the least prestigious predominantly white institutions, especially public comprehensive colleges and universities (Bryant, 1970; Mommsen, 1974). At the graduate level, black faculty, like academic women, are about half as likely to hold the Ph.D. as their white colleagues (Rafky, 1972; R. Freeman, 1978); and

those who do attain the doctorate tend to take much longer to do so than their white colleagues (footnote: Rafky (1972) found that the median time for Ph.D. completion for black faculty was thirteen years subsequent to receipt of the baccalaureate at a median age of thirty-six compared to a median completion time of seven and a half years post-B.A. at a median age of thirty for white faculty). Unlike academic women, however, black faculty were less likely than their majority male colleagues to pursue their doctoral studies at the most prestigious research universities--and this is especially true for the younger black faculty cohort (Rafky, 1972). In light of these conditions, the careers of black faculty, even more so than those of academic women, are likely to be adversely effected by their education and graduate training.

The Differential Context of the Academic Woman's Career

While academic women are more likely than men to interrupt their graduate study for childbirth and other domestic responsibilities (P. Patterson, 1974; Strober, 1975), they tend to complete their degrees about as quickly (Strober, 1975) if at a slightly later age (Tuckman, 1976); and, upon degree completion, typically plunge right into an academic career (Gappa and Uehling, 1980). Once having embarked on their career, they are no more likely than men to interrupt it for personal and family reasons (Folger, Bayer, and Astin, 1970; Bayer, 1973).

While, then, academic women pursue their career trajectory as directly, if a little later than, academic men, a number of constraints operate on that pursuit. Marriage and family responsibilities appear to be an important constraint (footnote: Marriage has traditionally been more of an advantage to professional male than the professional female: For men, the spouse functions

as a source of support, a household workhorse--minimizing family distractions to work--and even as a research assistant; for women, marriage and a family become something they have to juggle with their professional responsibilities (Koester and Clark, 1980)). While it is true that academic women are only half as likely to be married as academic men (45 versus 90 percent--Fulton, 1975; B. Freeman, 1977) and the plurality are indeed single, the proportion of married academic women is increasing among each new age cohort entering the profession--to nearly 60 percent among the most recent female enterants. Marital constraints, therefore, are particularly significant for younger female faculty--those who are in the thick of the tenure race--and will be even more so in the future should present trends continue.

Several recent studies (Herman and Gyllstrom, 1977; Koester and Clark, 1980) report that married female faculty experience more conflict between work and family roles than unmarried female faculty or married male faculty. The primary source of that strain appears to be sheer "lack of time" to meet opposing demands. Koester and Clark (1980) and Mayfield and Nash (1976) reported "time management" to be the number one source of tension for married female faculty. Herman and Gyllstrom (1977), Heckman et al (1977) and St. John-Parsons (1978) found that academic women, even those in proportedly equality-oriented relationships, tended to revert to traditional sex roles in the family--assuming responsibility for household maintenance, cooking, etc. and retaining primary responsibility for parenting. Thus, female faculty were found to spend 50-100 percent more time in home maintenance during the work week and during weekends than academic men (about twenty-eight hours overall-Gappa and Uehling, 1980) and 40 percent less time in professional work during the weekends (Herman and Gyllstrom, 1977)--

and all of this despite the extensive use of full-time childcare.

Beyond the day-to-day time constraints, marriage also appears to constrain the career mobility of academic women. While less likely to be married, they are two or three times as likely as academic men to have spouses who are professionals--frequently also professors (Simon, Clark and Galway, 1967; Astin, 1969; B. Freeman, 1977; Blackburn et al, 1980). This results in several sorts of constraints:

1. Enforced mobility when the spouse moves--Berger et al (1977) in a study of job-seeking strategies among dual-career couples, found that while most couples initially chose egalitarian strategies (optimization of opportunity for both), in response to market unfavorability, they tended to revert to the traditional strategy of giving the husband's career precedence. Astin (1969) found married female doctorates more mobile than the unmarried, primarily as a result of spouse job moves. And Reagan (1975) found that even female economics faculty who were "equal" or "major" earners in their family, were significantly more likely than men to have given up a good job in the past because their spouse had to move (nearly one-third of the females compared to 4 percent of the males).
2. Immobility owing to spouse's employment--Baldridge et al (1978) reported that while female faculty were more dissatisfied with their jobs than their male colleagues, they were significantly less likely to move as a result, among other things, of family considerations. Rose (1978) and Marwell et al (1979) found that while male and female faculty

> made about the same number of job shifts, women tended significantly more often to remain in the same geographic location (33 percent as compared with 7 percent of the men). And Reagan (1975) found that while female economics faculty who were "equal" or "major" family earners were as "willing" as men to move, their past mobility patterns indicate that the spouse's career has taken precedence.

And recognition of this enforced immobility leads to exploitation: Heckman et al (1977) found that among 200 couples holding joint membership in the American Psychological Association, nearly 20 percent cited professional exploitation, i.e. colleges and universities took advantage of a female academic's geographical "stuckness" to pay her less and offer her a non-regular appointment.

It appears clear, then, that marriage and family have an especially negative impact on the job mobility of female faculty and ultimately on their careers insofar as mobility, or the threat of mobility, has traditionally been associated with "moving up" in the academic world--both in rank and in salary. Academic women simply do not have that "ace in the hole" working for them: When they do change jobs, it is more likely to be in the same geographical location, and they are less likely to advance in rank and salary than their more geographically mobile male colleagues (Marwell, 1977).

If marriage and family responsibilities constrain the career mobility of female faculty and increase the stress level under which they must operate on a daily basis, the evidence suggests that the preemptiveness of the family role may not directly account for sex-related differences in performance, especially in the area of research. Nine recent investigations have sought

to examine the relationship between marital and parental status and the research productivity of female faculty (Simon, Clark and Galway, 1967; Astin, 1969; Folger, Astin and Bayer, 1970; Cole and Cole, 1973; Centra, 1974; Weidman and Weidman, 197 ; Ferber and Loeb, 19 ; B. Freeman, 1977; Hamovitch and Morganstern, 1978). Two-thirds of these studies found no significant difference in research productivity between married and unmarried academic women (footnote: Among these studies, all three that examined the relationship for males found that married men were indeed more productive than unmarried men; and four/five that examined the impact of parental status found it to be non-significant). Indeed, two/three of the "discrepant" studies (B. Freeman, 1977; Astin, 1978) found that married women were actually more productive than their single colleagues. Initial differences at the assistant professor level were quite small, but swelled to the point that at the full professor level, married females outpublished single females by two or three to one and also outpublished married males. The third discrepant study, Astin (1969), reports lower productivity among married women academics--but, the relationship is very small (r_p = - .06) and of limited practical significance. Still further doubts are cast on the significance of the relationship by the peculiarities of Astin's sample: Astin extended her survey to female Ph.D. recipients, generally, rather than limiting it to those who were employed full-time in the labor force. By including non-working doctoral recipients and those employed part-time who are more likely to be married, to be parents, and to be non-productive, Astin increased the likelihood of finding a negative relationship.

While it would appear, then, that marital and parental responsibilities cannot account for sex-related differences in research performance, this

consensus needs to be interpreted with caution. While the studies focus on cumulative publication over the academic career, they seek to relate it to respondent marital status only at the time of the survey. This creates a high potential for the misclassification of individual respondents: A faculty member just married, yet single during most of their career would be classified as married; similarly, someone who has been married most of their career and is recently just widowed or divorced would be classified as single. How might such misclassification effect the findings? It may be that they effectively cancel each other out (about equal numbers of married and single respondents are misclassified); or, it may be that errors of classification hide any real relationship that might exist. We have no way of telling.

To the extent, however, that we lend credence to these findings, then we are led to conclude that while family role constraints make for added stress and reduce the advancement opportunities that attend mobility, they do not explain male-female differentials in research performance. And that explanation still seems to reside in activity preferences/orientations that seem attributable to earlier sex roles socialization.

The Differential Context of the Black Professor's Academic Career

While black female faculty experience the same conflict between professional and family responsibilities, they, together with black male faculty, seem to be subject to the additional tug-of-war between their professional and community responsibilities (the "larger" family, as it were).

Walker (1973) detected a "double-consciousness" among black university professors as they struggled to reconcile the frequently incompatible behaviors demanded of them by the academic and black communities: Incompatibilities between the action research orientation demanded by the Afro-American community

versus the academic research orientation demanded by tenure and promotion committees; the incompatibility between the role of scholar versus the role of community activist: Incompatibilities between the communicative style characterizing the two communities; and, the sheer time demands imposed by service to both.

This "double-consciousness" is reflected in the goals black faculty pursue in their teaching: The preparation of students to compete in the economic system versus the development of commitment to the black community (Hayden, 1978). More immediately, it is reflected in the tensions of daily work. Moore and Wagstaff (1974) and Middleton (1978) report on the individual psychological repercussions of at once pursuing promotion and tenure and serving as the "resident" black, i.e. becoming involved in the counseling of black students, serving on a disproportinate share of committees, especially those concerned with affirmative action and minority affairs, attending black events on campus, as well as maintaining relationships with the black community. Moreover, the dilemma is confounded insofar as most black faculty are in education, the humanities, and the social sciences, and their research and teaching directly or indirectly, touches on matters of race.

While no studies empirically test the effect of these tensions on black faculty performance and career advancement, impressionistic evidence suggests that for those black faculty caught on the wrong side of the dilemma, both performance and career advancement may suffer (Middleton, 1978).

The Peculiar Stresses of Being a "Token"

Quite beyond the conflicts generated by divided loyalties to profession and family/community, women and minority faculty, single and married, are subject to the additional stress of frequently being the only one of their

kind in a department--the deviant individual in an otherwise racially and/or sexually homogeneous group.

Kanter (1977, 1979) has examined the impact of low proportional representation of a particular social category on group functioning in business organizations. In "skewed" groups i.e. groups in which one social category predominates over another by a ratio of more than 85:15, she uncovered a set of dynamics which empirically defines "tokenism." In such skewed groups, the token: (1) tends, as a deviant, to have high visibility (which creates performance pressures of its own) and to function as a "symbol" of their social category for the dominant group (creating the additional pressure of representing all women or all blacks to the dominant group); (2) provides the impetus (occasion) for increased self consciousness among the dominants of their common culture and ipso facto the token's deviance (and this is reflected in the tendency to isolate tokens on the periphery of colleague interaction--the token is not quite to be trusted); and (3) is stereotyped, i.e. subsumed under pre-existing generalizations about their category as a group and forced into playing limited and caricatured roles (e.g., the female faculty member relegated to taking minutes at the committee meeting; the minority faculty member assigned responsibilities related to affirmative action, etc.).

While there has been no full scale empirical test of Kanter's paradigm as it operates in Academe, a number of related pieces of evidence suggestively support the constellation of group dynamics associated with tokenism: ieam. Kaufman's (1978) studies of colleagueship/network involvement among female faculty reveal a pattern of greater relative scholarly isolation as do Middleton's (1978) and Anderson et als (1979) studies

of black faculty;

Item. The phenomenon of viewing individual female and minority faculty as representatives of their social categories is a familiar pattern in Academe (e.g. the black faculty member is the instant expert on black students);

Item. Studies of job satisfaction show that women scholars (single as well as married) are significantly less satisfied with their jobs than male academics (Herman and Gyllstrom, 1977; Baldridge et al, 1978). Moreover, those at the most prestigious institutions (where women are scarcest) and those who are youngest (and have not yet developed successful coping strategies) are the least satisfied of all.

Just how token status per se effects performance (i.e. the comparison of token and non-token women and minorities) remains to be examined. To the extent that tokenism is a major determinant of the work performance of women and minorities, then the most viable solution will be to increase the proportion of women and minority group members of academic departments (i.e. move toward more "balanced" groups)--a goal that appears to be mitigated by current responses to affirmative action pressures, i.e. the establishment of token slots in academic departments (Steele and Green, 1976).

A Final Word

On the basis of the preceding analysis, what conclusions can be drawn about the status of women and minority faculty in Academe?

Most importantly, it appears that the situation of women and minority faculty is the resultant of a constellation of forces. Beyond inequities in training opportunities and in hiring, promotion and compensation practices which may be attributable to overt discrimination on the part of the professoriate, a number of less directly "manipulable" factors are at work. There is, first of all, the matter of early socialization and the orientations and activity preferences to which it gives rise. The evidence clearly suggests that a heightened orientation to teaching and student development, a disinclination to empirical research, and selection to more teaching oriented institutions cannot be attributed solely, or even primarily, to discrimination against individuals on the sole basis of their sex or racial/ethnic origin. Similarly, the sex and race related constraints on the pursuit of an academic career seem more attributable to culturally prescribed family and community roles than to purposeful discrimination against individuals. Colleges and universities, in and of themselves, are hardly in a position to attack differential early socialization and prescribed family/community role relationships directly. (Footnote: They can, to be sure, serve as a forum for highlighting these social inequities and even for mobilizing intellectual resources to respond to them). They are, however, in a position to more directly attack inequities within the academy itself, i.e., recognize the peculiar impacts of early socialization and sociocultural constraints and attempt to adjust employment policies/practices and the organizational reward system to accommodate group differences. It

should be recognized, however, that current practices and the current reward system have evolved over time to meet the needs and orientations of the largest number of academics--majority males. It would be most reasonable to expect change to occur only to the extent to which the composition of the professoriate actually changes, i.e. to the extent that numerically significant minorities emerge that can mobilize significant support for change. In the case of academic women, that numerical significance in graduate education and in the professoriate itself and that mobilization of support began to emerge in the late 1970s--at the very same time that the women's movement was mobilizing significant support for change in early socialization and family roles. Thus, institutions of higher education have begun to respond to the negative impact of anti-nepotism regulations, to needs for pregnancy leave and child care centers, etc. In the case of racial minorities, that numerical significance and mobilization of support has yet to emerge; and the data on graduate school enrollments are not encouraging.

If indeed numerical growth is the key to change, then the decade of the 1980s brings with it a bitter irony (at least for academic women): At the very time when social conditions support a significant infusion of women into the professoriate, the opportunities for an academic career are declining dramatically; and, if current enrollment projections are credible, will continue to do so for at least the next decade and a half. To what extent the significant contingent of academic women among "new hires" will fall prey to the tenure squeeze and/or retrenchment or will make their way into the senior ranks of the professoriate and further empower themselves and the cause of equity should determine the situation of women and minority faculty well into the twenty-first century. (Footnote: Insofar as academic

women tend to be significantly more sensitive to general issues of discrimination and equity than majority males (Ladd and Lipset, 1976), it seems reasonable to assume that, at least to some extent, their rise in significant numbers to senior ranks will bring with it an increased push toward equity. The possibility remains, however, of co-optation and for the newly elite few to over identify with the "academic establishment" and turn against their own--a phenomenon Kanter (1977, 1979) observed among new women managers.

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